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Federal Communications Commission Office of Secretary

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
)	Public Notice re:
Federal-State Joint Board on)	CC Docket No. 96 - 45
Universal Service)	[DA 96-1078]
)	

COMMENTS OF ON QUESTIONS IN PUBLIC NOTICE OF JULY 3, 1996

ON QUESTIONS IN PUBLIC NOTICE OF DOCKET FILE COPY ORIGINAL

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American Library Association Summary Responses to Selected Questions

FCC Public Notice CC Docket 96-45 July 3, 1996 [DA 96-1078]

Below are summary answers by the American Library Association (ALA) to some of the questions put by the Common Carrier Bureau in the matter of the proposed rulemaking on universal service, CC Docket 96-45. We have answered only selected questions (6-19, 21-24) for which, in our view, libraries have a particular perspective to offer and a stake in the outcome. These comments will further explicate the ALA proposals made in our April 10 filing of comments and our May 7 reply comments.

Schools, Libraries, Health Care Providers

- 6. **Summary Answer**: ALA has proposed that any telecommunications services, or elements thereof, available commercially by tariff or through contract should be made available to libraries and schools at a discount. This definition provides flexibility for libraries and schools to choose those services that best meet their needs, automatically includes new services as they come on the market, avoids the need for further regulatory proceedings to define special services, and is technologically neutral.
- 7. **Summary Answer**: The FCC is empowered under the Telecommunications Act of 1934 to include and is not prevented under the 1996 Act from including in this rulemaking all elements of end-to-end service. In particular, the definition of special services as the term is used in the legislation and as ALA has recommended it be defined, includes inside wiring. But, besides typical cable and other connective facilities, the definition of "inside wiring" also encompasses ancillary modifications to permit installation, e.g. to buildings or at network connection points, and both direct connection and these ancillary costs could be eligible for discounts.
- 8. Summary Answer: There are many costs associated with providing electronic access to information resources that are not intended to be covered under universal service provisions of the Act. Funds available under these sections might appropriately be used to pay some of these costs, such as for initial startup investments, staff training and orientation, curriculum development, and acquisition of content. However, they should not be viewed as a substitute for discounts on telecommunications services as specified in Section 254 of the Act.
- 9. **Summary Answer:** The plan offered by ALA supports a competitive market environment. On the demand side, it allows libraries and schools to act as viable consumers, either as individual purchasers of services or as members of coalitions, regardless of cost conditions. On the supply side, the proposal ensures that the telecommunications service provider is compensated at an amount that is equal to a competitive market price.

- 10. **Summary Answer**: ALA urges that the prohibition on resale be narrowly construed to only limit resale to the public for profit. A distinction should be drawn between applications and the underlying communication service; the resale prohibition should not apply to applications. Such a construction would encourage the formation of cooperative arrangements among libraries and schools, while a broader, more restrictive interpretation could well make such organizations difficult if not impossible to form.
- 11. **Summary Answer**: In its conference report on Section 254, Congress clearly stated "that consortiums of educational institutions providing distance learning to elementary and secondary schools be considered an educational provider for purposes of this section." Consortia make available added educational and other resources to schools and libraries and enable them to aggregate purchasing power.
- 12. and 13. **Summary Answer**: ALA strongly opposes these "block grant" approaches in any form. Not only are they counter to the spirit and words of the Act, which explicitly calls for discounts, they would institute a cumbersome, top-down process for allocating credits or funds in place of a bottom-up, consumer-driven system of discounts. Discounts encourage flexible implementation of new technology and empower local libraries and school systems to develop solutions most appropriate for their own needs and technological environment.
- 14. **Summary Answer:** The apparent need for such measures is a good example of why ALA opposes block grants or any such top-down distribution. As stated above, ALA believes that sufficient accountability would exist in a discount program without the need for top down or centralized oversight.
- 15. **Summary Answer:** ALA has recommended that the term "bona-fide request" simply means a request from a duly authorized individual at any library eligible for participation under Title III of the Library Services and Construction Act. This requirement would be easy to verify and should not place any burdensome requirement on either service providers or regulators.
- 16. **Summary Answer:** ALA's recommendation as the base, discounted, price is the lower of (1) the best commercial price offered or (2) TSLRIC. In non-low income, non-high cost areas, this approach is the best approximation to the price that would prevail in a competitive marketplace for the service--essentially, a commodity price. TSLRIC, has a sound basis in both economic theory and in regulatory practice as reflecting that price without distortion and encourages competition on economic and regulatory grounds.
- 17. **Summary Answer:** If particular schools or libraries are currently receiving special rates from carriers--as is the case in some circumstances--nothing in the Joint Board's rule-making should be construed as prohibiting those institutions from continuing to take advantage of those

¹ H.R. CONF. REP. No. 458, 104th Cong., 2d Sess. 134 (1996)

special rates as long as the contract is in effect.

- 18. Summary Answer: Georgia is an example of a state that, after more than a year of careful consideration, has incorporated a TSLRIC approach in its state's universal service access fund order. Other states, such as California and Texas, have also incorporated this approach into their state laws or regulatory processes. Many telecommunications companies employ this methodology as well.
- 19. **Summary Answer:** ALA has proposed that additional discounts be given in both high-cost and low-income areas. In the case in which a region is both high-cost and low-income, these additional discounts should be combined.
- 21. **Summary Answer:** For libraries and schools in rural, insular, and high cost (RIHC) areas, the support provided would be equal to the difference between the high cost area provider's TSLRIC and the average TSLRIC for comparable service in low cost areas. The Commission may also wish to consider an approach that makes use of the discounts applied to core services in RIHC areas and apply those discounts to the special services requested by schools and libraries in those same areas. For economically disadvantaged areas, ALA suggests that adjustments could be tied to some measure of poverty, such as that used by the U.S. Census Bureau, in which more highly disadvantaged areas would be eligible for larger discounts.
- 22. **Summary Answer:** On this question, ALA simply notes that the language in Section 254 (h)(1)(A) for rural health care providers differs somewhat from that in paragraph (B) for schools and libraries. From the library perspective, there seems no particular reason either to favor one approach over the other, or to insist that there be similar (or identical) approaches to funding mechanisms.
- 23. **Summary Answer:** While the Kickstart cost estimates may provide some useful guidance to schools in making funding estimates, they are based on misleading assumptions of what facilities small and rural libraries need and the services those libraries need to provide.
- 24. **Summary Answer:** ALA presents a simplified cost model based on its discount proposal This model makes a number of assumptions with regard to the rate of technology deployment, the cost and level of service provided, the distribution of libraries and schools among metropolitan and non-metropolitan areas, and other factors. Based on these assumptions, the model estimates that the draw on the universal service fund <u>for ongoing connectivity costs only</u> over 5 years would total over \$300 million for libraries and \$1.6 billion for schools or over \$1.9 billion dollars total for both types of institutions combined.

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COMMENTS OF <u>AMERICAN LIBRARY ASSOCIATION</u> ON QUESTIONS IN PUBLIC NOTICE OF JULY 3, 1996

The American Library Association (ALA) is pleased to submit answers to some of the questions put by the Common Carrier Bureau in the matter of the proposed rulemaking on universal service, CC Docket 96-45. We have answered only selected questions (6-19, 21-24) for which, in our view, libraries have a particular perspective to offer and a stake in the outcome. These comments will further explicate the ALA proposals made in our April 10 filing of comments and our May 7 reply comments.

Schools. Libraries. Health Care Providers

6. Should the services or functionalities eligible for discounts be specifically limited and identified, or should the discount apply to all available services?

Answer: In its earlier comments, ALA recommended that any telecommunications service offered commercially under tariff or through contract in a region should be made available to libraries at a discount. ALA believes that no attempt should be made to define a restricted set of special services in specific detail.

In order to fulfill their mission to serve as community access points to the world's information resources, libraries need to stay at or as near the leading edge of technology as possible. Communication technology is changing rapidly. New information services, particularly multimedia applications, are making steadily increasing demands on bandwidth. Each library will need the flexibility to select services consonant with the needs of their community and with the services commercially available at the time

We would be concerned that any such list of services would inevitably be a lowest common denominator list, omitting new high-level services that some libraries might need. Libraries will need to stay on the leading edge of new communication media in order to provide their patrons with access to the most current information resources and services. In some cases, libraries will even serve as beta test sites for experimental new services—as they do now in many digital library research and development projects.

Furthermore, since the list would be created through some form of regulatory rule-making, the processes for modifying the list would be slow and cumbersome, particularly compared to the high rate of technological change that now characterizes information technology. The cost/performance ratio of computer-based information technology continues to improve at an incredible rate. For example, microprocessors double in speed every 18 months!

The theoretical capabilities of communication systems, since they are based on the same types of technology, improve at similar rates, although the infrastructure nature of

¹ David A. Patterson, *Microprocessors in 2020*. SCIENTIFIC AMERICAN, Sept. 1995, at 62-67.

communications means that the rate at which these improvements are widely deployed to public networks can be much slower. Nevertheless, as computer and communication systems become more tightly integrated, technological advances in both computers and communication systems drive each other forward in the marketplace.

Raw performance is not the only measurement of change. The overall architecture and capabilities of information systems are changing rapidly, as computers and networks are integrated ever more closely together and in new and impredictable ways. As a result, entirely new services and ways of delivering them can arise overnight. Libraries, if they are to serve their function, must be equally quick to adapt.

Finally, the difficulty in keeping up with technological change, requiring a frequent modification of the list, would pose an additional, unnecessary burden on both regulatory bodies and public participants in the process. Allowing the definition of special services to include any commercially available telecommunications service, or elements thereof, offered by contract or tariff, also allows regulators to remain neutral regarding the types of technologies that should be promoted or used in furtherance of universal service goals

7. Does Section 254(h) contemplate that inside wiring or other internal connections to classrooms may be eligible for universal service support of telecommunications services provided to schools and libraries? If so, what is the estimated cost of the inside wiring and other internal connections?

Answer: The FCC is empowered under the Communications Act of 1934 to include, and is not prevented under the Telecommunications Act of 1996 (the Act) from including all elements of end-to-end service in this rulemaking. In particular the definition of special services as the

term is used in the legislation and as ALA has recommended it be defined, includes inside wiring. But, besides typical cable and other connective facilities, the definition of "inside wiring" also encompasses ancillary modifications to permit installation, e.g. to buildings or at network connection points. The sum of direct connection and these ancillary costs could be eligible for discounts.

The issue seems to be especially critical for schools. The Act specifically refers to connecting classrooms, which suggests that a goal of the legislation is to connect all classrooms within a school. Most libraries, on the other hand, provide public access in central locations—for efficiency, for better supervision, and to more easily provide user training and assistance.

However, some very large libraries are experimenting with distributing terminals throughout their facilities.

The costs of inside wiring also depend on the characteristics of user facilities: the age of buildings, the existence of asbestos, the structure and composition of the building, and so on. In many cases, rewiring can only be done efficiently in context of a broader remodeling.

8. To what extent should the provisions of Sections 706 and 708 be considered by the Joint Board and be relied upon to provide advanced services to schools, libraries and health care providers?

Answer: ALA recognizes that there are many costs to schools and libraries associated with providing electronic access to information resources that are not intended to be covered under universal service provisions of the Act. Funds available under Section 708 might be appropriately used to pay some of these costs, such as for initial startup investments, staff training and orientation, curriculum development, and acquisition of content. However, they

should not be viewed as a substitute for discounts on telecommunications services as specified in Section 254 of the Act.

9. <u>How can universal service support for schools, libraries, and health care providers be structured to promote competition?</u>

Answer: Although the law does not explicitly state as a goal or principle that universal service be structured to promote competition, it is important that whatever plan is established not harm and if possible, promote the development of competitive offerings in the information marketplace. The plan offered by ALA supports a competitive market environment for telecommunications. It does so in two ways:

First, on the demand side, in every case it allows libraries and schools to act as effective and full-fledged consumers of the telecommunications service, either as individual purchasers or as members of coalitions by providing them with adequate buying power in a fully competitive marketplace environment.

Secondly, on the supply side, the ALA proposal ensures that the telecommunications service provider has equivalent incentives to serve the library community, since the supplier is compensated for discounts at a level that brings the firm's overall payments into equivalence with competitive market prices.

Thus, with discount levels being set typically at fully compensatory levels for the economic costs of service, the firm will be earning a profit level at least as high as it could obtain in its next best investment opportunity. In this instance, no USF augmentation would be required. In a some instances, the discount may be set below the economic costs based on high cost or low income factors. This would necessitate use of the universal service fund (USF) to compensate for the

difference.

It is important to note that a competitive market price is not necessarily equal to the historical accounting costs of service, since accounting figures can reflect cost recovery associated with past ineffectual investment, marketing, strategic, and other supplier decisions. The USF is not intended to recover differences between the accounting and economic costs of service. To use the fund in this fashion would, in fact, be anticompetitive, economically inefficient, and would run counter to the express purposes of the 1996 Act.

It should stand to reason that, as long as contributions to the universal fund are made by all carriers on an equitable and non-discriminatory basis the opportunity to provide services at a competitive market price will serve as a full and adequate incentive to spur deployment and promote competitive market offerings. If not, the conceptual framework of deregulation would seem to be in question.

TSLRIC, which would typically be the discount price ³ under the ALA proposal, is considered by economists to be a surrogate for a price that would be charged in a competitive marketplace. On that basis. ALA believes that there would be no need to draw on the universal service fund in cases where TSLRIC is, in fact, the discounted price. In general, the amount drawn from the universal service fund should be the difference between the price actually charged to libraries and schools and a retail level that reflects a competitive market and the

² Telecommunications Act of 1996, Pub L No 104-104, § 254, part (d) of the Telecommunications Act of 1996.

³ Or, in the cases of high cost and low income areas, the basis for further discount.

rapid technological advance referred to above.

ALA is aware that there is not full accord regarding what constitutes a competitive market price, particularly whether it contains sufficient economic (rather than accounting) return on investment and adequately accounts for economic joint and common costs. This question has surfaced in proceedings dealing with policy issues other than universal service. ALA suggests that the following principles should guide the Joint Board deliberations:

Consistency: Whatever definition of competitive market price is arrived at should be consistent with decisions in other areas of regulation, such as interconnection, and should, to the extent possible, be consistent with approaches at the state level. ALA is not seeking a new, special and unique definition of price that would be derived for and apply only to schools and libraries.

Soundly based: The definition of competitive market price should be soundly based in regulatory economic theory and financial practice. It should reflect how companies, themselves, would calculate an acceptable entry price for a service in a competitive market. This market price should approximate the price for the service in a fully competitive market. For instance, the Universal Service Fund should not be used to subsidize the front end costs for deployment of new technology. Nor should it be used to subsidize monopoly rents in noncompetitive markets, or the costs of noneconomic or ill-advised carrier investments in the past or in the future.

If the total compensation to the service provider is such a price, the firm will have adequate incentive to compete for the business of libraries, schools, and health care providers in competitive markets where the service has been broadly deployed. This will also apply in the

few other remaining markets where USF reimbursements bring the supplier's return to that available in competitive markets.

For advanced services for which the market has not yet matured, it is possible that providers will identify other markets that are more highly profitable than libraries and schools would be under this plan. In those cases, long-term business strategy and their self-interest in accelerating the development of future markets will motivate companies to provide services to libraries and schools. These institutions provide locations where the market can be grown through the introduction of telecommunications and information services to the larger community. At libraries and schools, adults as well as children can be trained and become familiar with these new information tools, resulting in an even larger market for these services, and potentially accelerating the adoption of these services by a larger consumer community.

10. Should the resale prohibition in Section 254(h)(3) be construed to prohibit only the resale of services to the public for profit, and should it be construed so as to permit end user cost based fees for services? Would construction in this manner facilitate community networks and/or aggregation of purchasing power?

Answer: The prohibition on resale should be narrowly construed to limit resale to the public for profit. Such a prohibition was included in the Act to protect against unfair competition from reselling of communication services by beneficiaries of the discounts. The rule-making should and can achieve that purpose without invalidating arrangements for sharing costs among consortium members or charging modest end-user fees. The fees are usually intended to help defray costs associated with special applications or to allocate access to more expensive services.

ALA believes that a broad construction of the prohibition on resale would invalidate or at

least create serious impediments to the formation of collaborative groups that wish to aggregate purchase of communication services. Such cooperatives are formed for a variety of beneficial purposes, such as aggregating purchase power and sharing expertise and resources. A narrow interpretation of the provision would allow such beneficial arrangements to develop, while a broadly restrictive interpretation would be harmful to such efforts.

The comments filed by the Lincoln Trail Libraries System in Illinois illustrate a multi-type library cooperative typical of those found in several states:

Lincoln Trail Libraries System is a state sponsored organization serving the libraries of 116 members in East Central Illinois. Academic, public, school, and special libraries participate as members. Lincoln Trail member facilities are spread over approximately 250 buildings in a nine county area. This area is largely rural. The median population served for participating school districts is 795, and the median size for participating public libraries is 3.042. The median budget of all participating libraries is \$54,000, with some annual budgets as low as less than \$10,000 per year.⁴

In ALA s earlier filing, we also suggested that a distinction should be drawn between applications and the underlying communication service, and that the resale prohibition should not apply to applications. Washington State Library comments suggest that

the FCC should seriously consider separating the telecommunications **mechanisms** that make an electronically based service possible (the tool) from the **service** itself (the product) in applying the 'no resale' prohibition. For instance, a library may not resell its discounted access to its city government, but it may levy a fee for Internet classes, or setting up and maintaining an Internet account through the library, or for

⁴ Lincoln Trail Libraries System, Comments, CC Docket No. 96-45, Apr. 5, 1996 at 1.

maintaining a web site for its unit of local government. Such an application would appear to satisfy the intent of the Telecommunications Act, but this distinction would be more easily known and understood by all concerned if the FCC clarifies it.⁵

11. If the answer to the first question in number 10 is "yes," should the discounts be available only for the traffic or network usage attributable to the educational entities that qualify for the Section 254 discounts?

Answer: In its conference report on Section 254. Congress clearly stated "that consortiums of educational institutions providing distance learning to elementary and secondary schools be considered an educational provider for purposes of this section."

Clearly, one of the primary goals of the Act is to ensure that educational institutions have access to affordable telecommunications services. We believe that encouraging the growth of community-based consortia which include libraries and schools is one highly effective method of furthering this goal.

These consortia further the goals of the Act in several different ways. The broad consortium approach to community networking enhances the educational potential of the network by including partners and resources that might not otherwise be available. By providing access to their resources, community network partners (such as universities and local government) amplify the educational benefits of the network above and beyond that which schools and libraries could provide on their own. For instance, consortia might provide all

⁵ *Id.* at 17.

⁶ H.R. CONF. REP. No. 458, 104th Cong., 2d Sess. 134 (1996).

members with access to the resources of the local university library, as well as provide access to important information on local government. The Commission rules in this proceeding should encourage institutions to contribute their resources to the educational efforts of schools and libraries. In addition to the obvious educational benefits of these resources, access to this information can help build civic participation and interest by enabling all members of a consortium to access important information.

Consortia also improve the ability of schools and libraries to get access to the sophisticated telecommunications services they need. Aggregate purchasing of services not only guarantees lower prices for schools and libraries but also enables schools and libraries to pool the demand in areas where local providers might be reluctant to offer sophisticated telecommunications services. This aggregation of community demand has proven an effective method for attracting telecommunications services in many under-served communities across the country.

Aggregation has also led in many cases to the purchasing of "package deals" which include services that, while furthering the telecommunications goals of the educational entities, might not be eligible for discounts under the Act. In these arrangements, schools are better able to serve their constituencies because of the mix of partners in the consortium and the broad variety of services that these partners need.

Finally, consortia are better equipped to deal with the ongoing costs of financing and supporting a telecommunications service. While the ongoing technical support and training costs associated with a network might be more than a school or library could support on its own, distributing these costs among the members of a consortium is a proven method of supporting these ongoing costs

12. Should discounts be directed to the states in the form of block grants?

And

13. Should discounts for schools, libraries, and health care providers take the form of direct billing credits for telecommunications services provided to eligible institutions?

Answer: ALA strongly oppose these approaches that have been proposed by some respondents.

In the first place, these approaches are counter to the intent and words of the Act, which explicitly calls for discounts. The law states in Section 254 (h) (1) (B) that "All telecommunications carriers ... shall, upon a bona fide request..., provide such services to elementary schools, secondary schools, and libraries. at rates less than the amounts charged for similar services to other parties." This language is quite specific and was arrived at after careful consideration of alternative approaches.

Furthermore, these approaches would institute a cumbersome, top-down process for allocating credits or funds in place of a bottom-up, consumer-driven system of discounts.

Discounts encourage flexible implementation of new technology and empower local libraries and school systems to develop solutions most appropriate for their own needs and technological environment. At the same time, they promote accountability, since libraries and schools will still be investing a substantial amount of their own resources, for ongoing communication costs, for capital costs, and for human resources.

14. If the discounts are disbursed as block grants to states or as direct billing credits for schools, libraries, and health care providers, what, if any, measures should be implemented to assure that the funds allocated for discounts are used for their intended purposes?

Answer: The apparent need for such measures is a good example of why ALA opposes block grants or any such top-down distribution. As stated above, ALA believes that sufficient accountability would exist in a discount program without the need for top down or centralized oversight.

15. What is the least administratively burdensome requirement that could be used to ensure that requests for supported telecommunications services are bona fide requests within the intent of section 254(h)?

Answer: The eligibility requirement for libraries stated in the Telecommunications Act⁷ is that they be eligible for participation in state-based plans for Title III of the Library Services and Construction Act.⁸ No additional criteria are specified. This is the basis for the ALA recommendation that any request for services from a duly authorized individual in that library should constitute a bona fide request under the terms of the Telecommunications Act.

Should additional verification be necessary, the state library agency that administers LSCA funds would certainly be able to verify whether or not a library is, in fact, eligible for such funding.

16. What should be the base service prices to which discounts for schools and libraries are applied: (a) total service long-run incremental cost; (b) short-run incremental costs; (c) best

⁷ Telecommunications Act of 1996, Pub. L. No. 104-104, § 254, (h) (4). The wording in the Act is actually a negative construction, saying first that carriers shall provide services to libraries, then saying that libraries not eligible for Title III funds are not eligible for such discounts. This wording is equivalent to our statement above that any library eligible for Title III funds is eligible for discounts.

^{8 20} U.S.C. § 335c et seg.

commercially-available rate; (d) tariffed rate; (e) rate established through a competitively-bid contract in which schools and libraries participate; (f) lowest of some group of the above; or (g) some other benchmark? How could the best commercially-available rate be ascertained in light of the fact that many such rates may be established pursuant to confidential contractual arrangements?

Answer: ALA's recommendation as the base, discounted, price is the lower of (1) the best commercial price offered or (2) TSLRIC. In non-low income, non-high cost areas, it is the best approximation to the price that would prevail in a fully competitive marketplace for the service-essentially, a commodity price. TSLRIC is suggested—since it has a sound basis in both economic theory and in regulatory practice as reflecting that price. No other equally effective and economic, cost-based methodology has been offered in this proceeding.

Clearly, if cases existed in which the tariffed price were lower or in which, say for promotional reasons, the price offered to schools and libraries were lower than our suggested threshold, ALA would like to see that lower price prevail

ALA's proposal, in effect, is to concentrate universal service funding on high-cost and low income areas, and force commodity pricing in other areas. Thus, one of the attractive features of the ALA plan is that, as competition becomes prevalent in communications markets, technological advances will flow through to consumers via falling prices and will mirror our recommended base for library and school discounts.

ALA does not propose that the vendors release confidential information, but proposes that vendors would certify to customers that the price they are quoting is TSLRIC or best commercial rate. ALA believes that the amount of money at stake for the carrier would not be

worth the threat of civil suit and public exposure should they mislead. Our operating assumption is still that it is in the carriers best interests to deploy high speed digital technology to libraries in communities as quickly as possible, and that this interest far outweighs any short term advantage gained by charging higher than appropriate rates.

17. How should discounts be applied, if at all, for schools and libraries and rural health care providers that are currently receiving special rates?

Answer: If particular schools or libraries are currently receiving special rates from carriers-as is the case in some circumstances--nothing in the Joint Board's rule-making should be construed as prohibiting those institutions from continuing to take advantage of those special rates as long as the contract is in effect. More broadly there are many reasons why communications carriers might want to offer heavily discounted rates to schools and libraries, or possibly even in some circumstances offer services free. Where the carriers see it to their advantage to do so, they should be encouraged, and nothing in the rulemaking should be construed as preventing that. ALA's proposal, by specifying TSLRIC or best price, leaves the door open for such arrangements. On the other hand. USF funds should not be used to reimburse such promotional rates.

18. What states have established discount programs for telecommunications services provided to schools, libraries, and health care providers? Describe the programs, including the measurable outcomes and the associated costs.

Answer: The discount program ALA recommended in its original and reply comments to the proceeding on docket CC 96-45 calls for discounts to be offered based on the lower of either (1) the lowest price offered to any customer or (2) the Total Service Long Run Incremental Cost

(TSLRIC). Among the strengths of this recommendation is the fact that if a TSLRIC approach is employed, such approach would be consistent with state approaches to universal service.

For example, a recent interim order from the Georgia Public Service Commission dated June 20, 1996 states that its

Legislature intended the Universal Access Fund (UAF) subsidy to apply to economic cost, not embedded accounting cost....The Commission shall require any alternatively regulated local exchange company seeking reimbursement from the UAF to submit the following information, which the Commission finds is reasonably necessary to determine the actual and reasonable cost of providing basic local exchange services, O.C.GA. Sec. 46-5-167(f). Each applicant must submit a total service long run incremental cost study (TSLRIC) indicating the reasonable economic cost of providing the local services as defined in O.C.G.A. Sec. 46-5-160 et. Seq. See Appendix A.

In ALA's reply comments, information was provided regarding the use of this methodology in several states that have passed telecommunications legislation and/or are undergoing telecommunications regulatory proceedings. See Appendix B. It is noteworthy that several of those states, including Texas and California, are making use of this methodology specifically with regard to universal service proceedings.

19. Should an additional discount be given to schools and libraries located in rural, insular, high-cost and economically disadvantaged areas? What percentage of telecommunications services (e.g. Internet services) used by schools and libraries in such areas are or require toll calls?

Answer: ALA has proposed that additional discounts be given in both high-cost and low-income areas. In the case in which a region is both high-cost and low-income, these additional discounts should be combined.

ALA urges strongly that deep discounts be provided for such areas, where often, libraries

and schools are the key, perhaps even the only public access points to electronic information resources. Providing incentives for these institutions to get on-line and for the carriers to provide service will promote broad public access (the ultimate goal of all universal service), as well as hasten the widespread deployment of high end services.

ALA has no data with regard to toll calls to access information resources. However, the goal of public policy should be to move away from that situation as quickly as possible. As noted in our prior comments on this docket, the demands that libraries and schools must meet in providing access to high bandwidth information and applications to many simultaneous users calls for access to higher capacity capabilities than are currently available over conventional voice grade telephone lines

21. Should the Commission use a sliding scale approach (i.e., along a continuum of need) or a step approach (e.g., the Lifeline assistance program or the national school lunch program) to allocate any additional consideration given to schools and libraries located in rural, insular, high cost, and economically disadvantaged areas?

Answer: In our reply comments, ALA suggests two approaches for addressing the needs of libraries and schools in rural, insular, high cost (RIHC) and economically disadvantaged areas. For libraries and schools in RIHC areas, the support provided would be equal to the difference between the high cost area provider's TSLRIC and the average TSLRIC for comparable service in low cost areas. The Commission may also wish to consider an approach that makes use of the discounts applied to core services in RIHC areas and apply those discounts to the special services requested by schools and libraries in those same areas. Such a discount would be based on the RIHC telecommunications provider's TSLRIC would allow the use of a common methodology.

for core and special services, and should provide affordable rates assuming that the factors affecting high cost in RIHC areas are the same for core and special services.

For economically disadvantaged areas, ALA suggested that adjustments could be tied to some measure of poverty, such as that used by the U.S. Census Bureau, in which more highly disadvantaged areas would be eligible for larger discounts. Such an approach could be similar to that used for providing universal service support to low income customers for core services. The methodology employed for core service support might be adapted to allocate additional support to schools and libraries in disadvantaged areas.

In identifying high cost and economically disadvantaged areas, ALA strongly suggests that the entire service area of the library or library system be considered in order to more accurately reflect the service needs the library must meet.

22. Should separate funding mechanisms be established for schools and libraries and for rural health care providers?

Answer: On this question, ALA simply notes that the language in Section 254 (h)(1)(A) for rural health care providers differs somewhat from that in paragraph (B) for schools and libraries. From the library perspective, there seems no reason to favor one approach over the other, or to insist that there be similar (or identical) approaches to funding mechanisms.

23. Are the cost estimates contained in the McKinsey Report and NII *KickStart* Initiative an accurate funding estimate for the discount provisions for schools and libraries, assuming that tariffed rates are used as the base prices?

Answer: While the *Kickstart* cost estimates provide useful guidance in making funding estimates for schools, they are based on erroneous assumptions of what small and rural libraries

need, and the services they need to provide. In the first place, they were developed for a purpose other than to estimate communication costs: they were intended to estimate the total cost of connecting the nation's schools and public libraries to the network. Since communication costs are just a proportion of that total bill, the authors could be satisfied with much rougher estimates. More importantly, the authors do not appear to understand fully the nature of the library need for high bandwidth services. They estimate that the need for bandwidth is solely proportional to population served. This assumption is overly simplified

In fact, as ALA pointed out in its April 10th filing, the bandwidth needed by libraries depends to a great extent on the nature of the information services and resources to which they must provide access. The demands new services are placing on the network are increasing rapidly, as web sites move to multimedia and high resolution services and, as a result, libraries of all sizes need to stay as close to the leading edge of communications services as possible.

In contrast, the *KickStart* report estimates, for instance, that 40% of libraries serving populations under 25,000 people will be satisfied with low speed POTS, while the remaining 60% will just need ISDN. Although deployment in these areas may well be slowed by limited budgets to acquire equipment and training, the Joint Board should keep in mind that the need to provide access to high-end information services does not stop at the city limits. In fact, the need of these smaller libraries for such access is as great or even greater than for larger libraries.

24. Are there other cost estimates available that can serve as the basis for establishing a funding estimate for the discount provisions applicable to schools and libraries and to rural health care providers?

Answer: ALA presents a simplified cost model based on its discount proposal. This model

makes a number of assumptions with regard to the rate of technology deployment, the cost and level of service provided, the distribution of libraries and schools among metropolitan and non-metropolitan areas, and other factors. Based on these assumptions, the model estimates that the draw on the universal service fund for ongoing connectivity costs only⁹ over 5 years would total over \$300 million for libraries and \$1.615 million for schools or over \$1.9 billion dollars total for both types of institutions combined.¹⁰

The major elements of the model are as follows:

- 1) Institutions eligible for discount are located in one of four areas:
 - a) metropolitan, non-low income
 - b) metropolitan, low income
 - c) non-metropolitan, non-low income
 - d) metropolitan, low income

We use metropolitan area as a surrogate for a high density, low telecommunications cost area; low-income as a surrogate for "economically disadvantaged" areas; non-metropolitan areas serve as a surrogate for rural, insular, and (RIHC) high cost areas. In our model, public library facilities are distributed as follows:

⁹ It should be emphasized, that only data connections for Internet-type service is included in this model. Other services, for example installation for these data connections as well as long distance voice telephone service, should also be discounted services and would add to the overall draw on the universal service fund for libraries and schools.

The E-rate, a proposal for free access to telecommunications services for libraries and schools, has also been proposed by others. For comparative purposes, ALA calculates the cost to the universal service fund of the E-rate for ongoing connectivity costs only over 5 years would total over \$577 million for libraries and \$3.6 billion for schools or over \$4.1 billion dollars total for both types of institutions combined.

- a) 36% in metropolitan, non-low income areas
- b) 12% in metropolitan, low income areas
- c) 39% in non-metropolitan, non-low income areas
- d) 13% in non-metropolitan, low income areas
- 2) Eligible institutions would pay a discount based on the lower of the lowest commercially available price for a service or
 - a) in metropolitan, non-low income areas a price equivalent to the Total Service

 Long Run Incremental Cost (TSLRIC) of the service in that area.
 - b) in metropolitan, low income areas, a price equivalent to TSLRIC less an additional low income discount
 - c) in non-metropolitan, non-low income areas, a price equivalent to the TSLRIC of a comparable service in a metropolitan area.
 - d) in non-metropolitan, low income areas a price equivalent to the TSLRIC of a comparable service in a metropolitan area less an additional low income discount.
- 3) Where the price paid is based on TSLRIC, telecommunications carriers would receive a reimbursement equivalent to the difference between TSLRIC and the price paid by an eligible library or school. This would result in a draw on the universal service fund only for cases, b, c, and d above

The ongoing connectivity costs presented here are based on a number of assumptions with regard to the rate of technology deployment, cost and level of service, and other factors.

Numbers used in this model should be regarded as illustrative only. The model assumes